

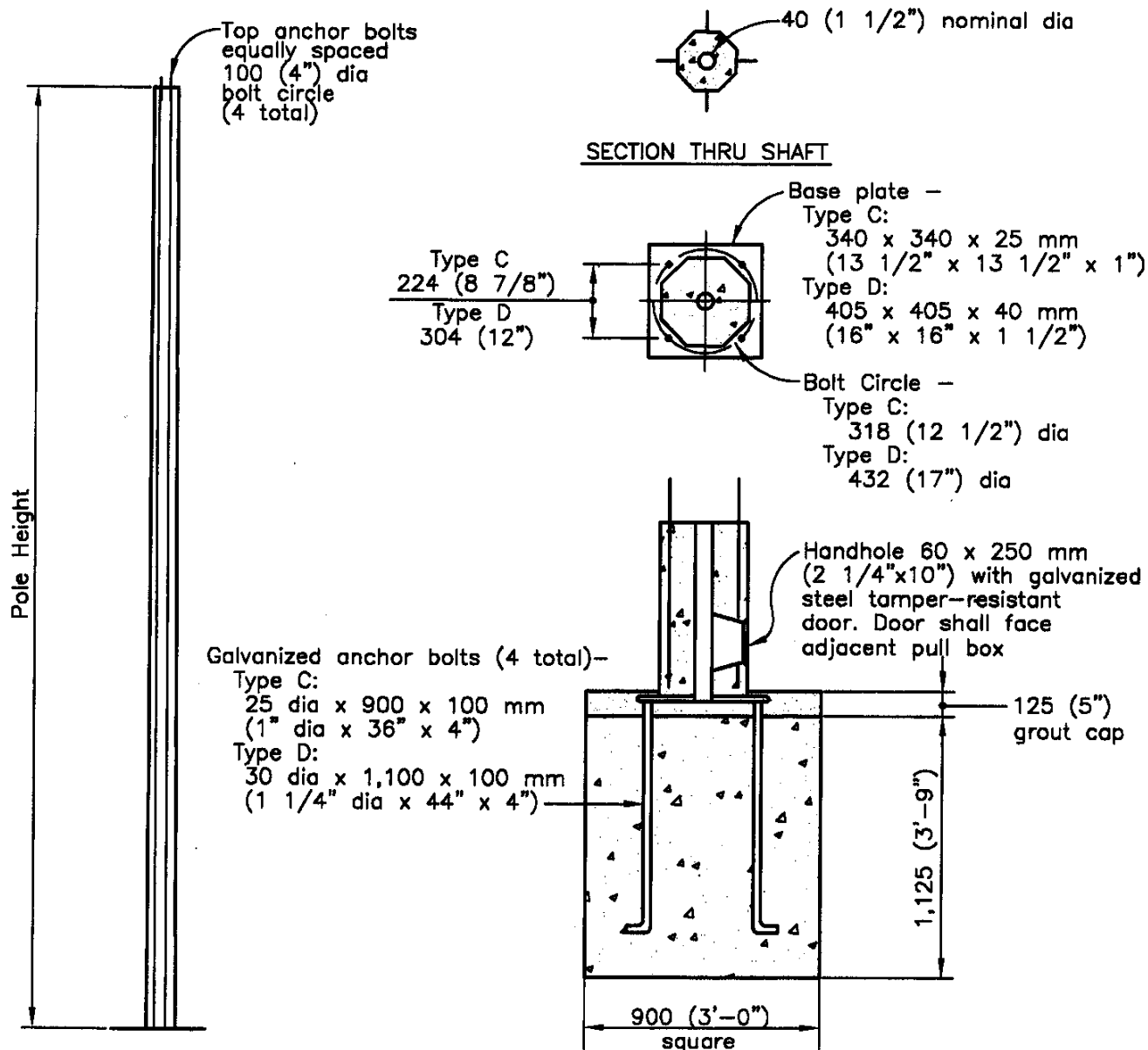
NOTES:

Pole shaft shall be constructed to withstand loading as specified in the latest edition of AASHTO standard specifications for structural supports for highway signs, luminaires, and traffic signals. Loading resulting from luminaire arm, and luminaire shall be taken into account.

Dimensions are in millimeters, except as noted

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REVISIONS		CITY OF LONG BEACH, CALIFORNIA DEPARTMENT OF PUBLIC WORKS	STANDARD PLAN NO.
NO.	DATE		
1	12/23/02	CONCRETE LIGHT STANDARD TYPE A & B	METRIC 701
2			
3			
4			
APPROVED BY: <u>Mark D. [Signature]</u>		DATE: <u>1/10/03</u>	SHEET 1 OF 1
CITY ENGINEER R.E. No. <u>40599</u>		EX. DATE <u>03/31/03</u>	

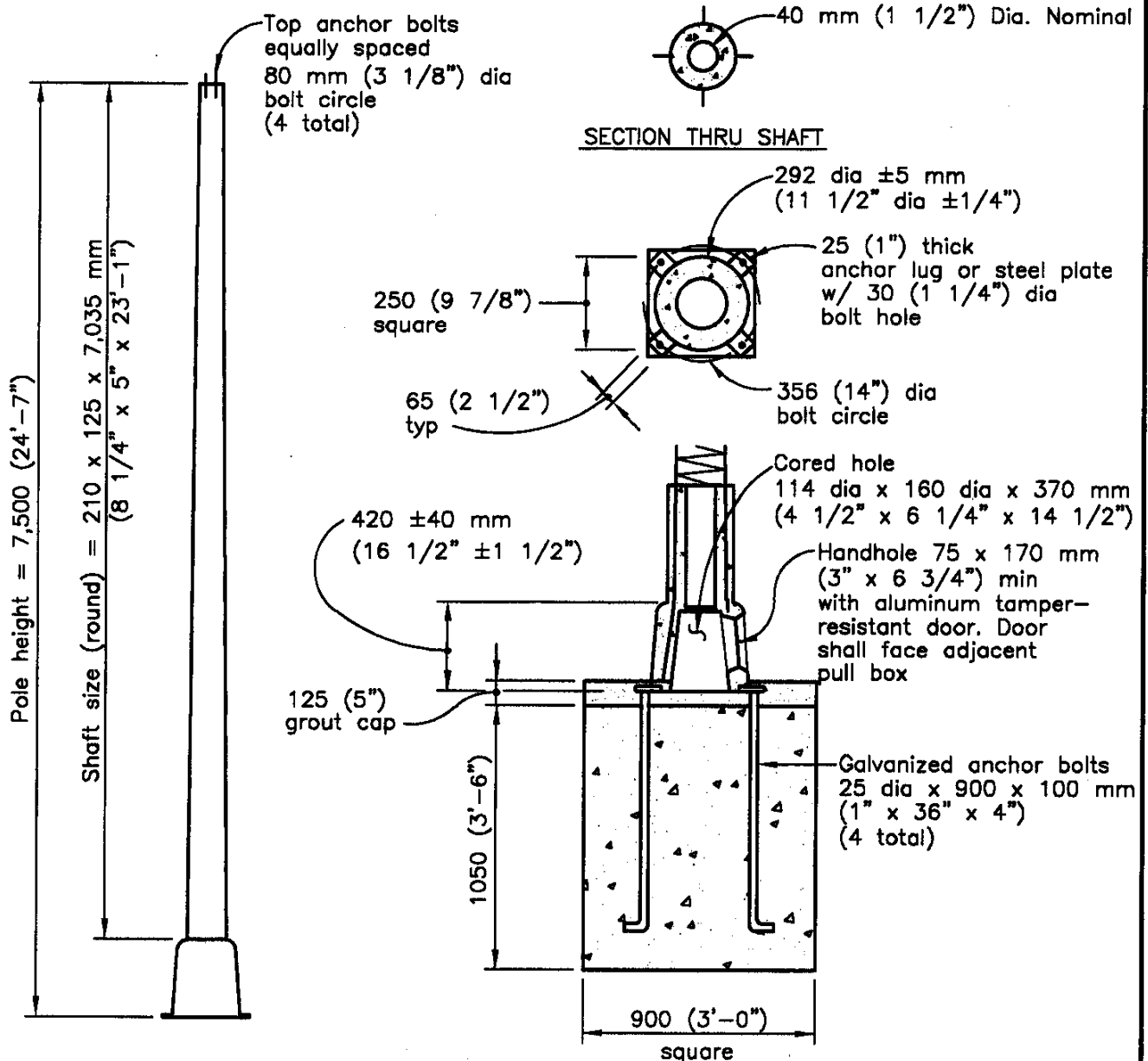


NOTES:

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Dimensions are in millimeters, except as noted

REVISIONS		CITY OF LONG BEACH, CALIFORNIA DEPARTMENT OF PUBLIC WORKS	STANDARD PLAN NO.
NO.	DATE		METRIC 702
1	12/23/02	CONCRETE LIGHT STANDARD TYPE C & D	SHEET 1 OF 1
2			
3			
4			
APPROVED BY: <i>Mal. Chittiford</i>		DATE: 1/10/03	
CITY ENGINEER R.E. No. 40599		EX. DATE: 03/31/03	

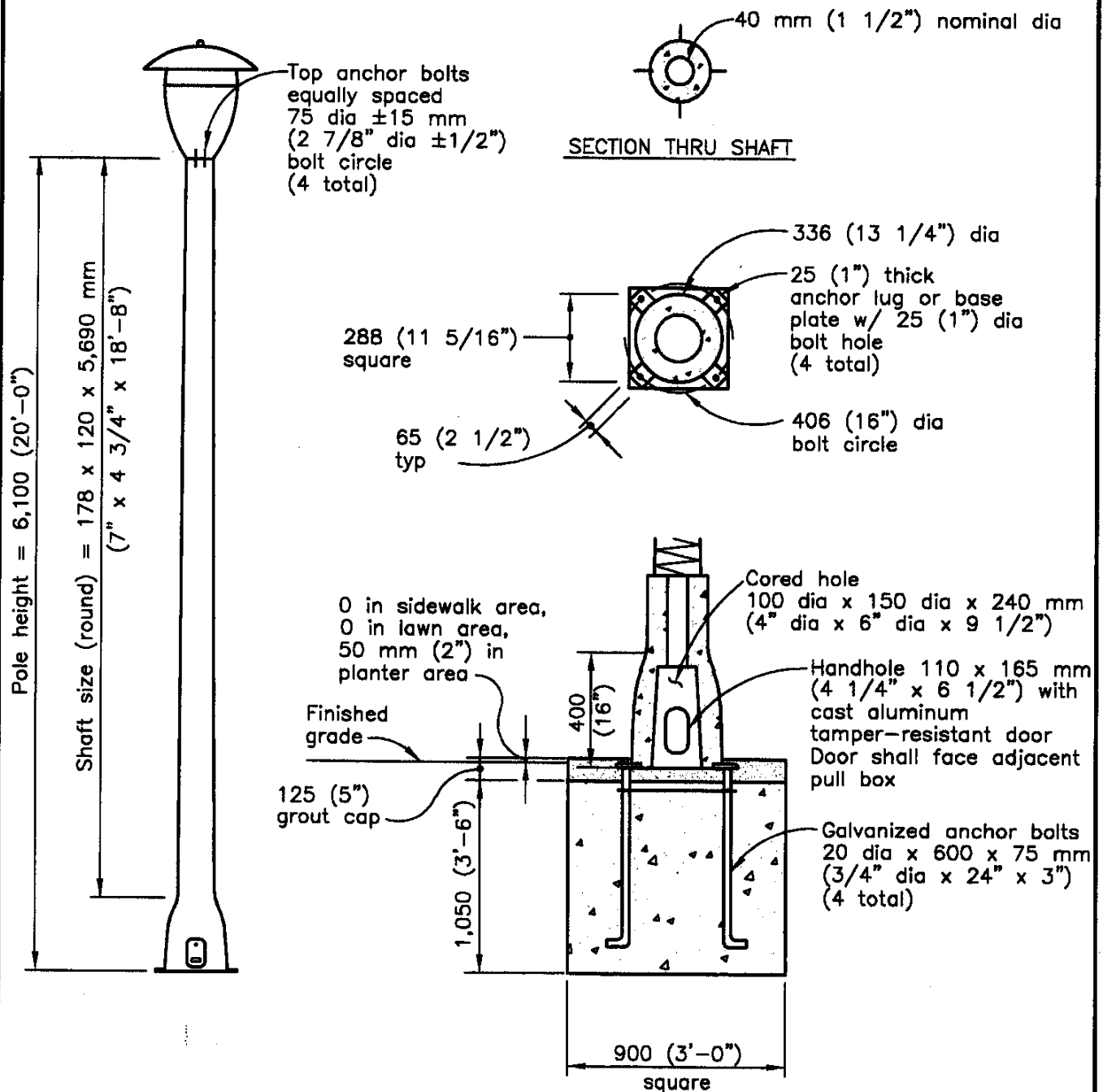


NOTES:

Pole shaft shall be constructed to withstand loading as specified in the latest edition of AASHTO standard specifications for structural supports for highway signs, luminaires, and traffic signals. Loading resulting from luminaire arm, and luminaire shall be taken into account.

Dimensions are in millimeters, except as noted

REVISIONS		CITY OF LONG BEACH, CALIFORNIA DEPARTMENT OF PUBLIC WORKS	STANDARD PLAN NO.
NO.	DATE		
1	12/23/02	CONCRETE LIGHT STANDARD TYPE F	METRIC 703
2			
3			
4		APPROVED BY: <i>Max D. [Signature]</i> CITY ENGINEER R.E. No. 40599	SHEET 1 OF 1
		DATE: 1/10/03 EX. DATE: 03/31/03	

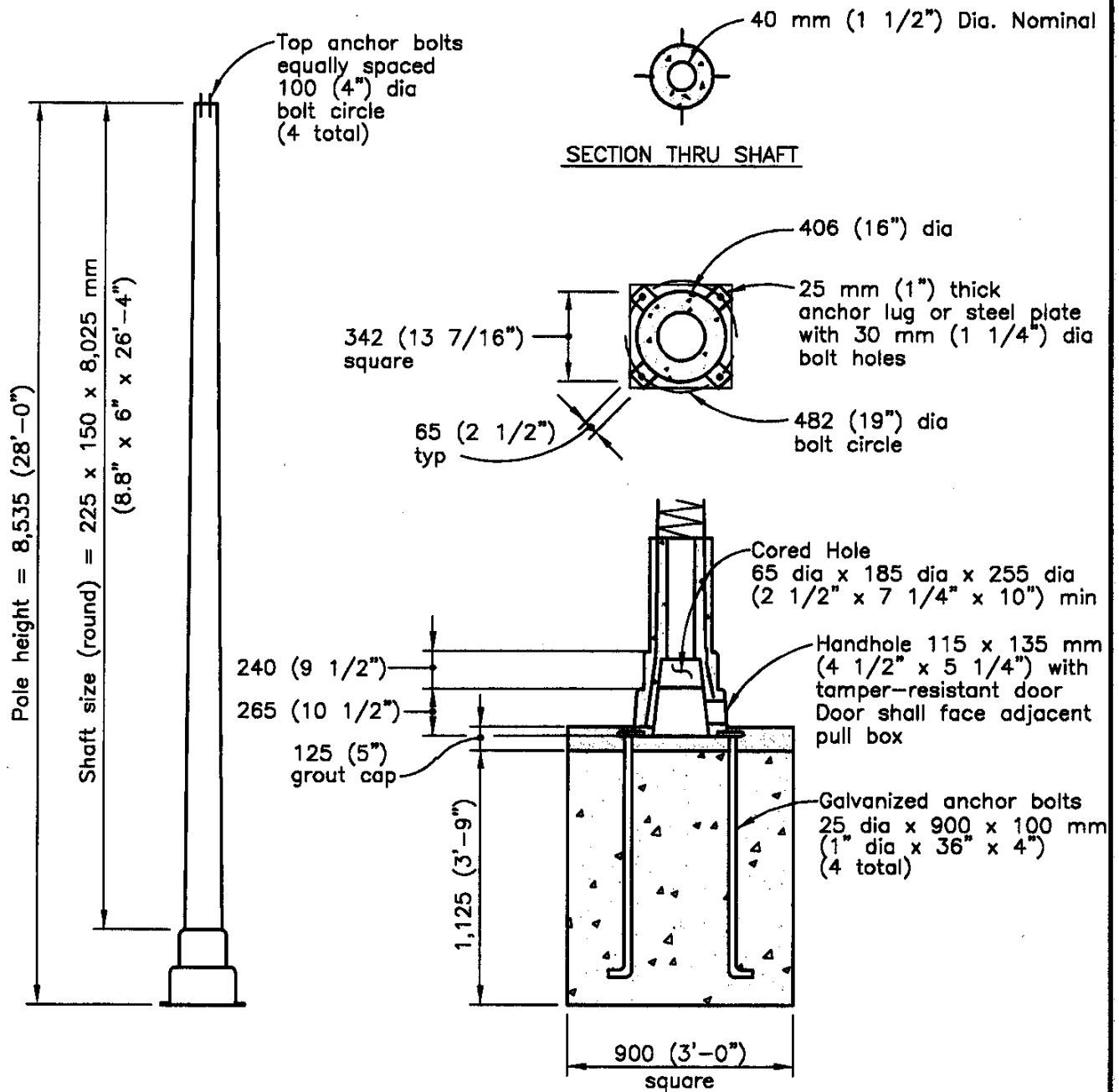


NOTES:

Pole shaft shall be constructed to withstand loading as specified in the latest edition of AASHTO standard specifications for structural supports for highway signs, luminaires, and traffic signals. Loading resulting from luminaire arm, and luminaire shall be taken into account.

Dimensions are in millimeters, except as noted

REVISIONS		CITY OF LONG BEACH, CALIFORNIA DEPARTMENT OF PUBLIC WORKS	STANDARD PLAN NO.
NO.	DATE		
1	12/23/02	CONCRETE LIGHT STANDARD TYPE G	METRIC 704
2			
3			
4			
APPROVED BY: <i>Mal. Quijano</i>		DATE: <i>1/10/03</i>	SHEET
CITY ENGINEER R.E. No. <i>0399</i>		EX. DATE: <i>03/31/03</i>	1 OF 1




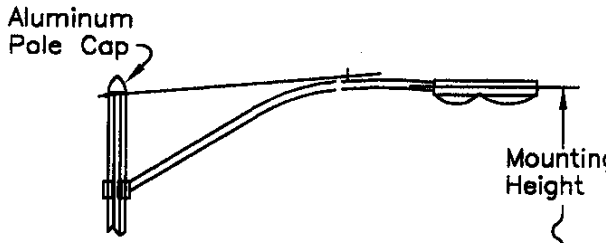
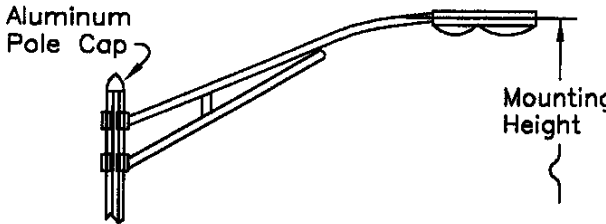


NOTES:

Pole shaft shall be constructed to withstand loading as specified in the latest edition of AASHTO standard specifications for structural supports for highway signs, luminaires, and traffic signals. Loading resulting from luminaire arm, and luminaire shall be taken into account.

Dimensions are in millimeters, except as noted

REVISIONS		CITY OF LONG BEACH, CALIFORNIA DEPARTMENT OF PUBLIC WORKS	STANDARD PLAN NO.
NO.	DATE		
1	12/23/02	CONCRETE LIGHT STANDARD TYPE H	METRIC 705
2			
3			
4		APPROVED BY: <i>Mark Chaffell</i> CITY ENGINEER R.E. No. <i>10399</i>	SHEET 1 OF 1
		DATE: <i>1/10/03</i> EX. DATE: <i>03/31/03</i>	

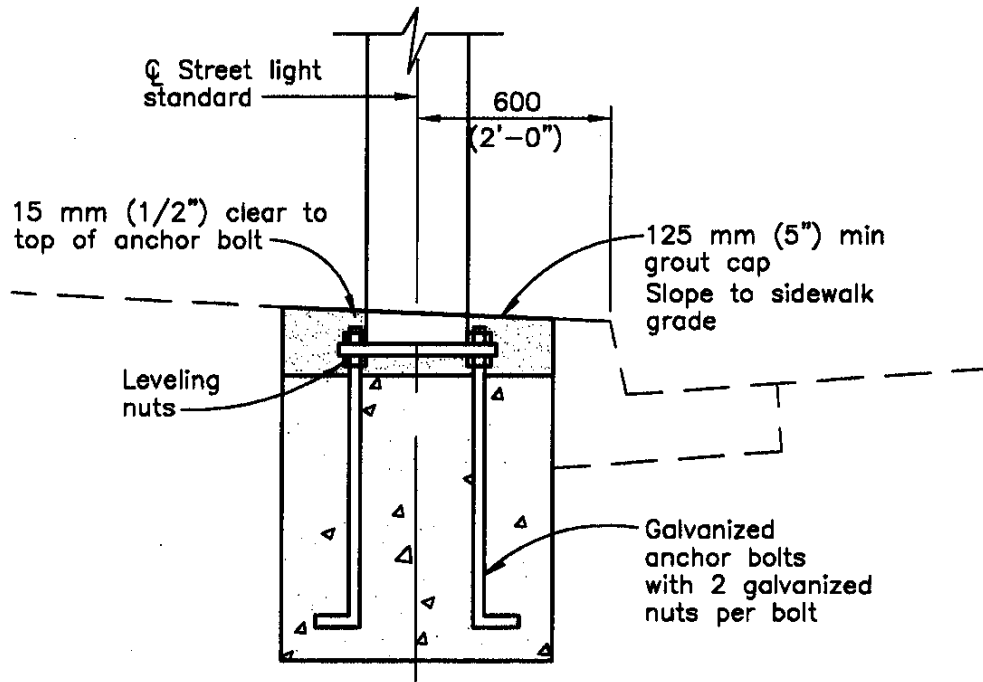
MAST ARM TYPE	LIGHT STANDARD	POLE HEIGHT	MAST ARM LENGTH	
			MOUNTING HEIGHT ±150 mm (±6")	
 CLAMP-ON-MAST ARM-TYPE I	TYPE A	8,000 mm (26'-3")	1,800 mm (6 foot)	2,400 mm (8 foot)
	TYPE B, C & D	9,525 mm (31'-3")	8,375 mm (27'-6")	8,600 mm (28'-3")
 TOP MOUNTED MAST ARM-TYPE II	TYPE A	8,000 mm (26'-3")	1,800 mm (6 foot)	2,400 mm (8 foot)
	TYPE B, C & D	9,525 mm (31'-3")	8,850 mm (29'-0")	9,075 mm (29'-9")
 TOP MOUNTED MAST ARM-TYPE III	TYPE F	7,500 mm (24'-7")	1,200 mm (4 foot)	1,800 mm (6 foot)
			8,075 mm (26'-6")	8,300 mm (27'-3")
	TYPE H	8,535 mm (28'-0")	1,800 mm (6 foot)	2,400 mm (8 foot)
			9,375 mm (30'-9")	9,600 mm (31'-6")
 CLAMP-ON WITH TIE-ROD-TYPE IV	TYPE A	8,000 mm (26'-3")	3,000 mm (10 foot)	3,600 mm (12 foot)
	TYPE B, C & D	9,525 mm (31'-3")	7,875 mm (25'-10")	8,100 mm (26'-7")
 CLAMP-ON TRUSS-TYPE V	TYPE C & D	9,525 mm (31'-3")	9,400 mm (30'-10")	9,625 mm (31'-7")
			10,900 mm (35'-9")	11,875 mm (39'-0")

NOTE:

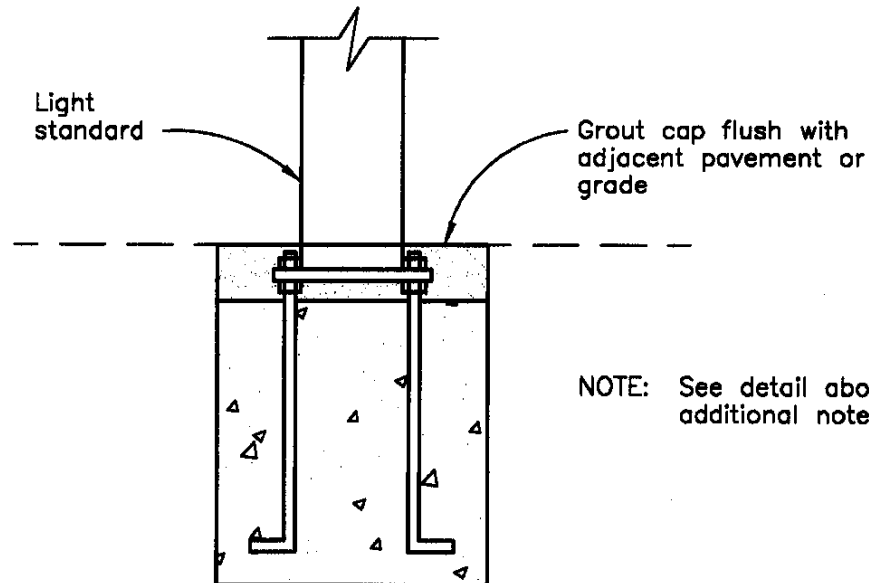
Electroliers shall be designated by light standard type, mast arm type and mast arm length, i.e., A-II-2400 (A-II-8).

Dimensions are in millimeters, except as noted

REVISIONS		CITY OF LONG BEACH, CALIFORNIA DEPARTMENT OF PUBLIC WORKS	STANDARD PLAN NO.
NO.	DATE		
1	01/06/98	MAST ARMS AND MOUNTING HEIGHTS	METRIC 706
2	12/23/02		
3			
4			
APPROVED BY: <i>Mal Chittell</i>		DATE: 1/10/03	SHEET 1 OF 1
CITY ENGINEER R.E. No. 0599		EX. DATE 03/31/03	



AT STREET LIGHT



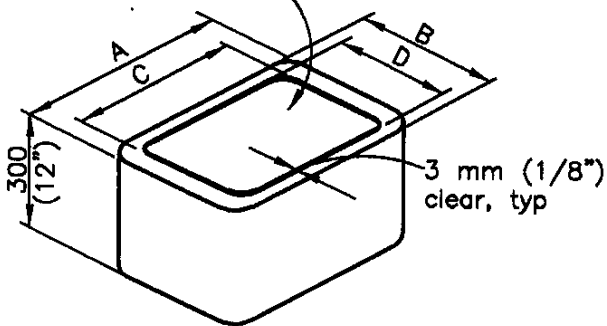
AREA LIGHTING

NOTE: See detail above for additional notes

Dimensions are in millimeters, except as noted

REVISIONS NO. DATE 1 01/08/98 2 12/23/02 3 4		CITY OF LONG BEACH, CALIFORNIA DEPARTMENT OF PUBLIC WORKS TYPICAL FOUNDATION DETAILS APPROVED BY: <i>Mark Smith</i> CITY ENGINEER R.E. No. <u>1099</u>	STANDARD PLAN NO. METRIC 707 SHEET 1 OF 1
		DATE: <u>1/10/03</u> EX. DATE: <u>03/31/03</u>	

Cover identification:
STREET LIGHTING
HIGH VOLTAGE



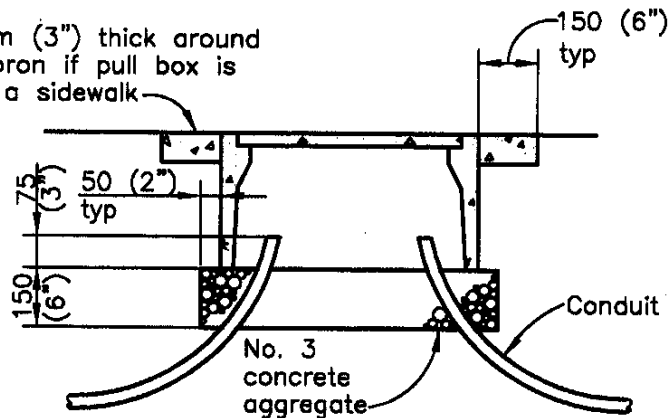
PULL BOX NO.	TYPE	DIMENSIONS			
		Outside		Cover	
		A	B	C	D
5	PCC	635 (25")	380 (15")	550 (21 3/4")	300 (11 3/4")
6	PCC	865 (34")	560 (22")	755 (29 3/4")	450 (17 3/4")

NOTE:

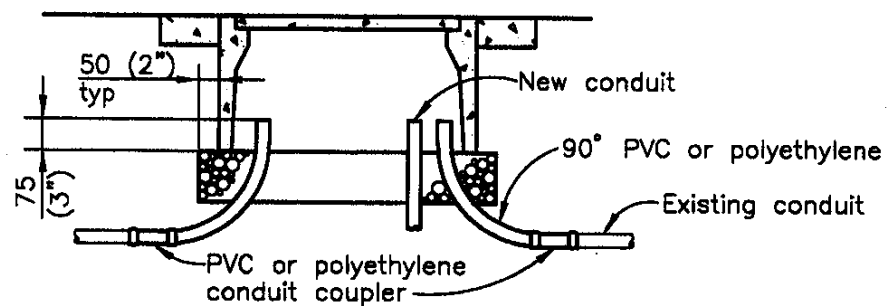
Pull boxes shall be non-boltdown
type unless noted.

PULL BOX DETAILS

PCC apron, 75 mm (3") thick around
pull box. Delete apron if pull box is
constructed within a sidewalk



TYPICAL PULL BOX INSTALLATION



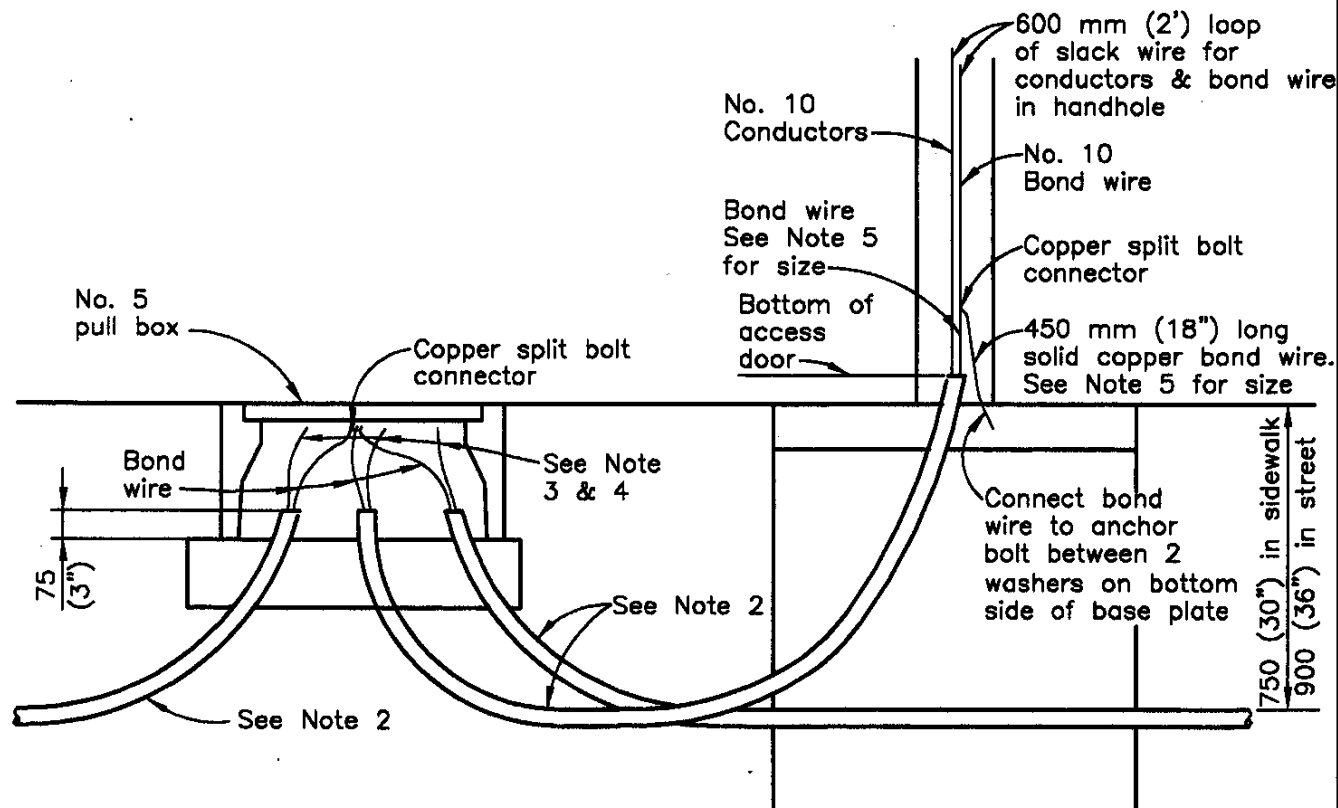
TYPICAL CONDUIT INTERCEPT

NOTE:

Size of coupler and new conduit shall be same size as existing conduit

Dimensions are in millimeters, except as noted

REVISIONS		CITY OF LONG BEACH, CALIFORNIA DEPARTMENT OF PUBLIC WORKS	STANDARD PLAN NO.
NO.	DATE		
1	01/21/98	PULL BOX & CONDUIT DETAILS	METRIC 708
2	12/23/02		
3		APPROVED BY: <i>Mark Chittell</i>	SHEET
4		CITY ENGINEER R.E. No. 4029	1 OF 1
		DATE: 1/10/03	
		EX. DATE: 03/31/03	

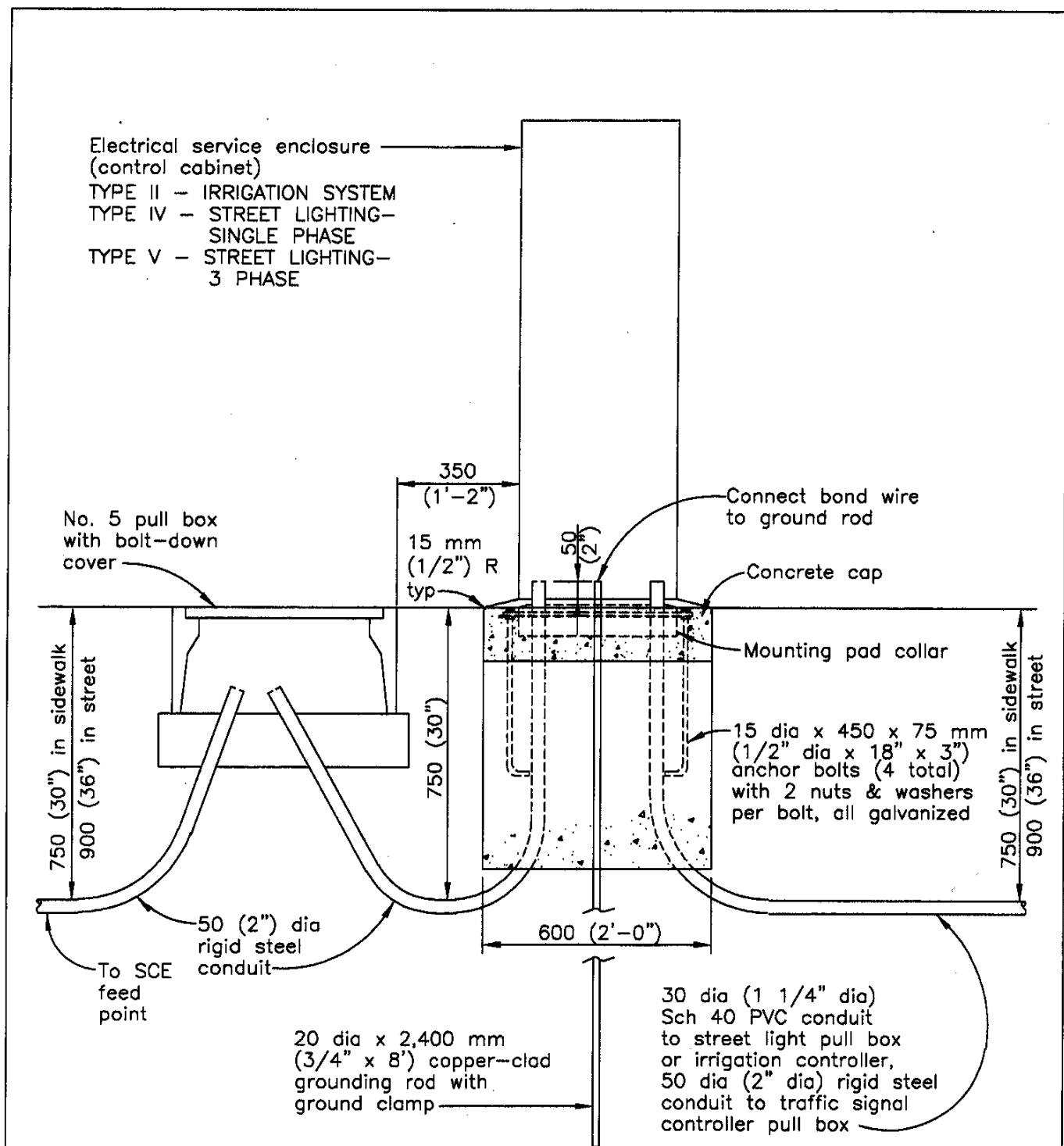


NOTES:

1. A No. 5 pull box shall be installed adjacent to all street light standards.
2. Conduit shall be 25 mm (1") Sch 40 PVC unless otherwise noted.
3. Series Circuits - Connect conductors to remote ballast in pull box.
4. Multiple Circuits - Connect conductors to fuseholder in pull box. See Standard Plan LB-713.
5. Bond wire shall be same size as conductor wire between street light pull boxes.
6. See Standard Plan LB-716 for additional notes.

Dimensions are in millimeters, except as noted

REVISIONS		CITY OF LONG BEACH, CALIFORNIA DEPARTMENT OF PUBLIC WORKS	STANDARD PLAN NO.
NO.	DATE		METRIC 709
1	01/22/98	PULL BOX AND STREET LIGHT CONDUIT AND CONDUCTOR DETAILS	SHEET 1 OF 1
2	12/23/02		
3		APPROVED BY: <i>Mark D. F. [Signature]</i>	DATE: 1/19/03
4		CITY ENGINEER R.E. No. 40599	EX. DATE 03/31/03

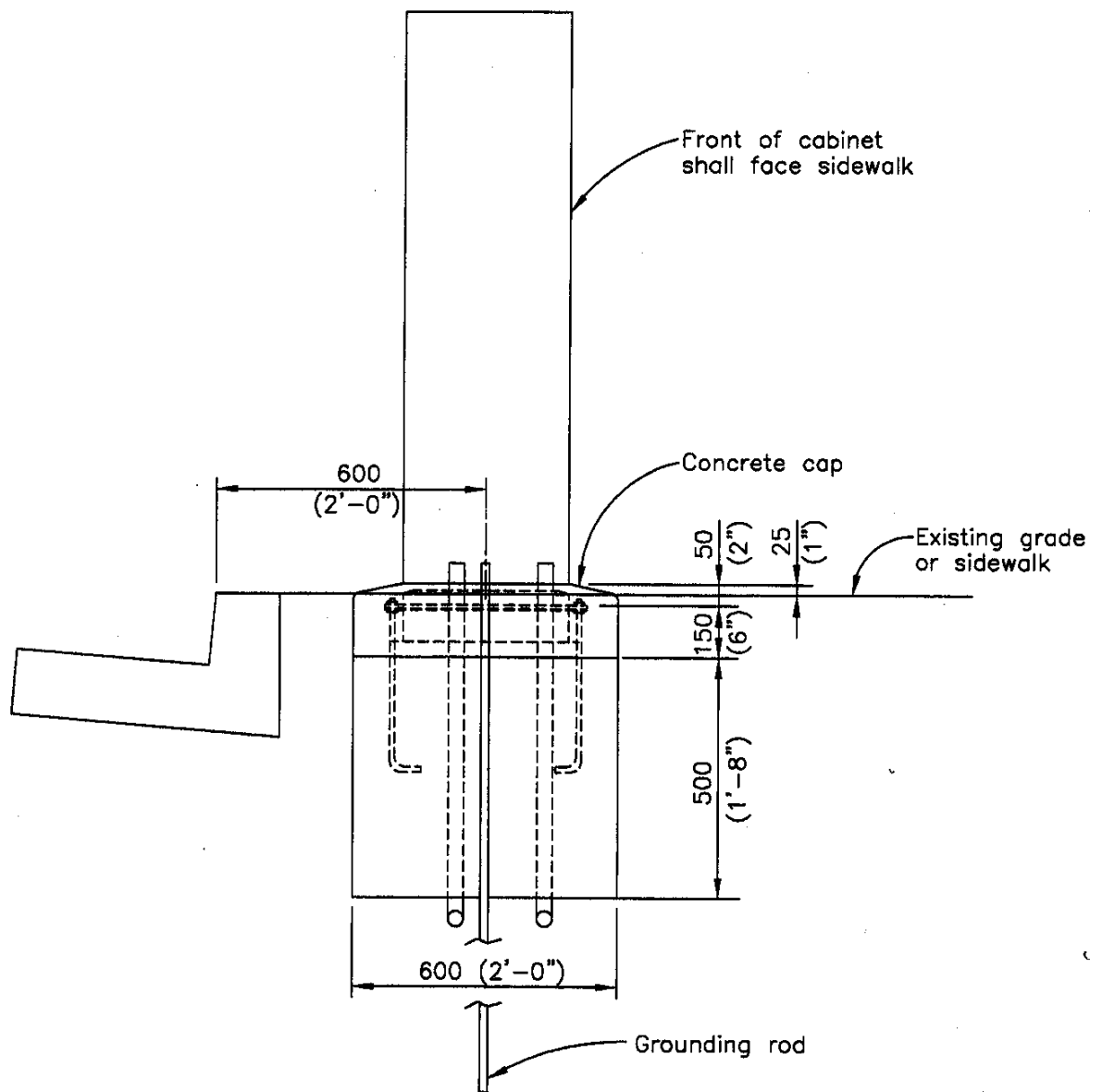


FRONT ELEVATION

Note: Does not apply to traffic signals

Dimensions are in millimeters, except as noted

REVISIONS		CITY OF LONG BEACH, CALIFORNIA DEPARTMENT OF PUBLIC WORKS	STANDARD PLAN NO.
NO.	DATE		
1	01/22/98	FEED POINT AND ELECTRICAL SERVICE CONTROL CABINET	METRIC 710
2	12/23/02		
3	02/28/03		
4			
APPROVED BY: <u>Ma duff</u>		DATE: <u>4/16/03</u>	SHEET 1 OF 3
CITY ENGINEER R.E. No. 40599		EX. DATE 03/31/07	



SIDE ELEVATION

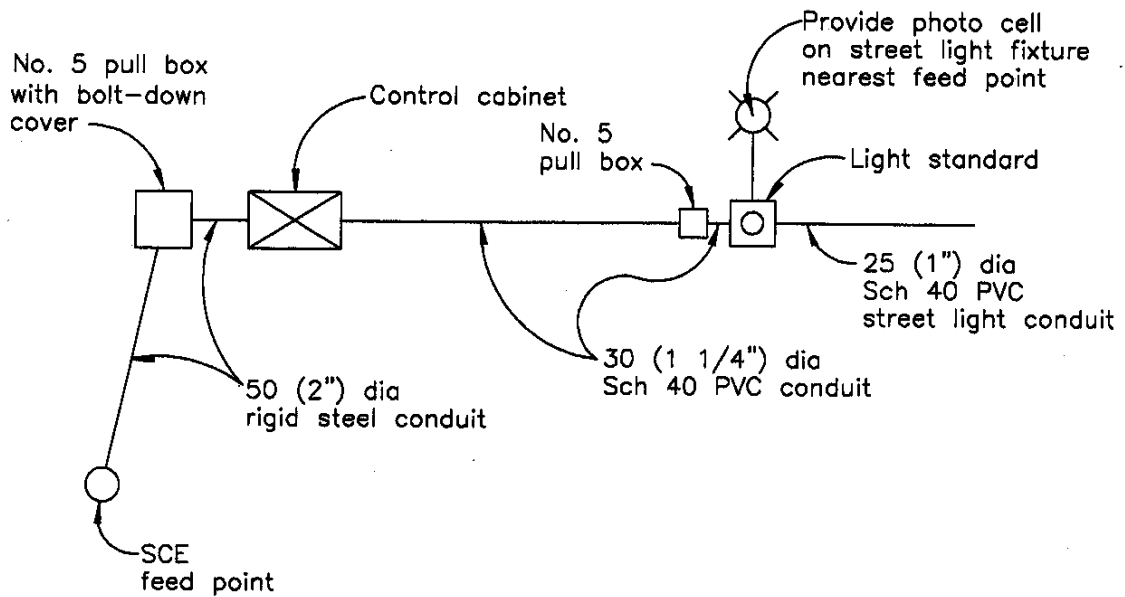
Note: Does not apply to traffic signals

NOTES:

1. Control cabinet shall conform to the City of Long Beach Specifications for "Electrical Service Enclosure."
2. Contractor shall notify City Light and Power at (562) 983-2000 48 hours before installing any conduit.

Dimensions are in millimeters, except as noted


REVISIONS		CITY OF LONG BEACH, CALIFORNIA DEPARTMENT OF PUBLIC WORKS	STANDARD PLAN NO.
NO.	DATE		
1	01/22/98	FEED POINT AND ELECTRICAL SERVICE CONTROL CABINET	METRIC 710
2	12/23/02		
3	02/28/03	APPROVED BY: <i>[Signature]</i> CITY ENGINEER R.F. No. 40599	SHEET
4			DATE: <i>4/16/03</i> EX. DATE: 03/31/07
			2 OF 3

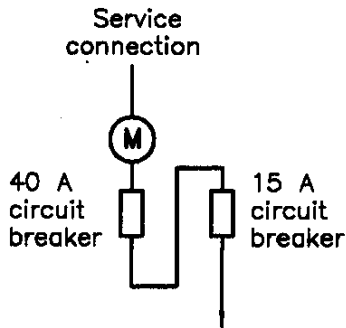


FEED POINT SCHEMATIC DETAIL
 Note: Does not apply to traffic signals

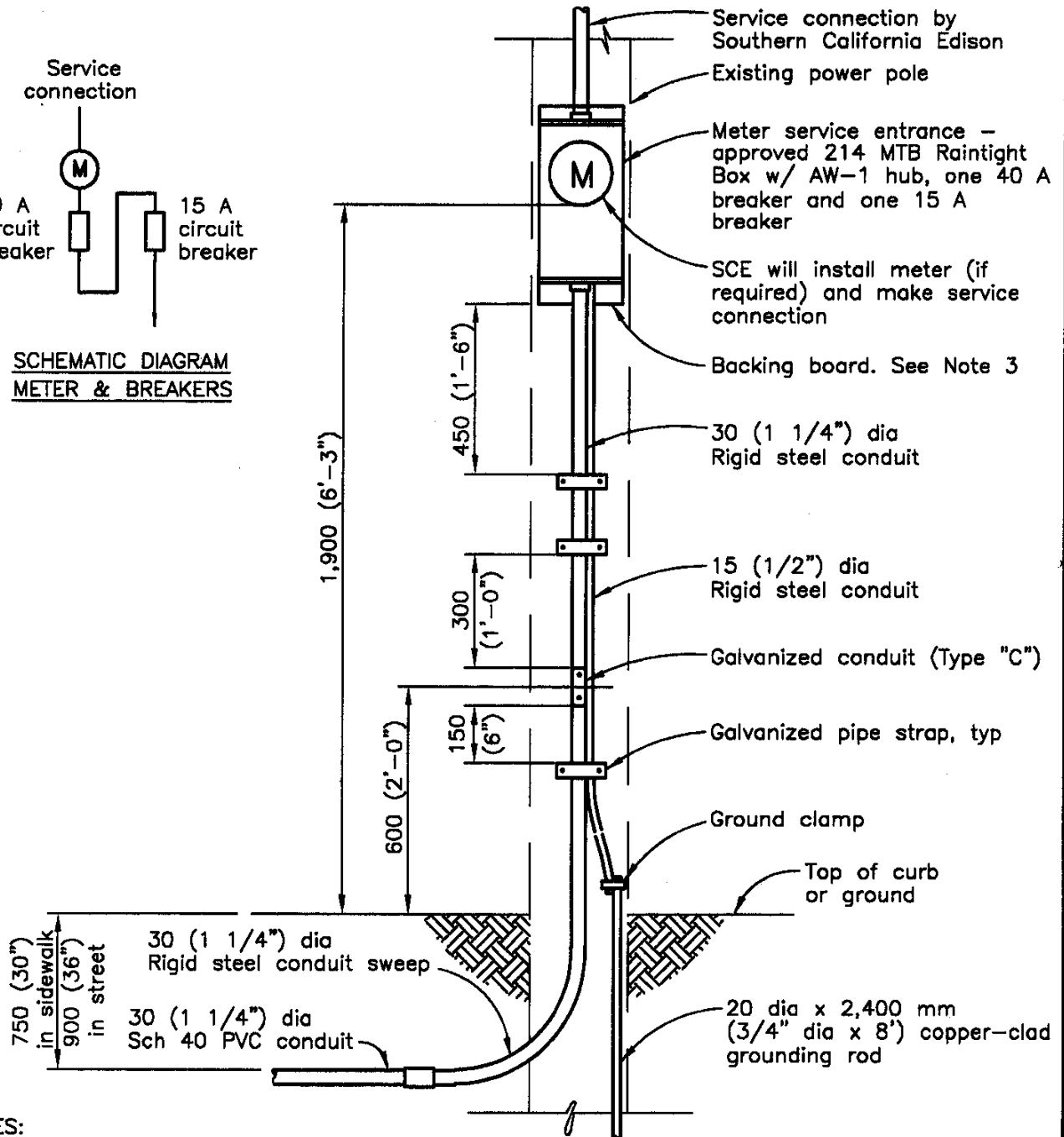
Dimensions are in millimeters, except as noted

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REVISIONS		CITY OF LONG BEACH, CALIFORNIA DEPARTMENT OF PUBLIC WORKS	STANDARD PLAN NO.
NO.	DATE		
1	01/22/98	FEED POINT AND ELECTRICAL SERVICE CONTROL CABINET	METRIC 710
2	12/23/02		
3	02/28/03		
4			
APPROVED BY: <u></u>		DATE: <u>4/16/03</u>	SHEET
CITY ENGINEER P.Z. No. 40599		EX. DATE <u>03/31/07</u>	3 OF 3



**SCHEMATIC DIAGRAM
METER & BREAKERS**

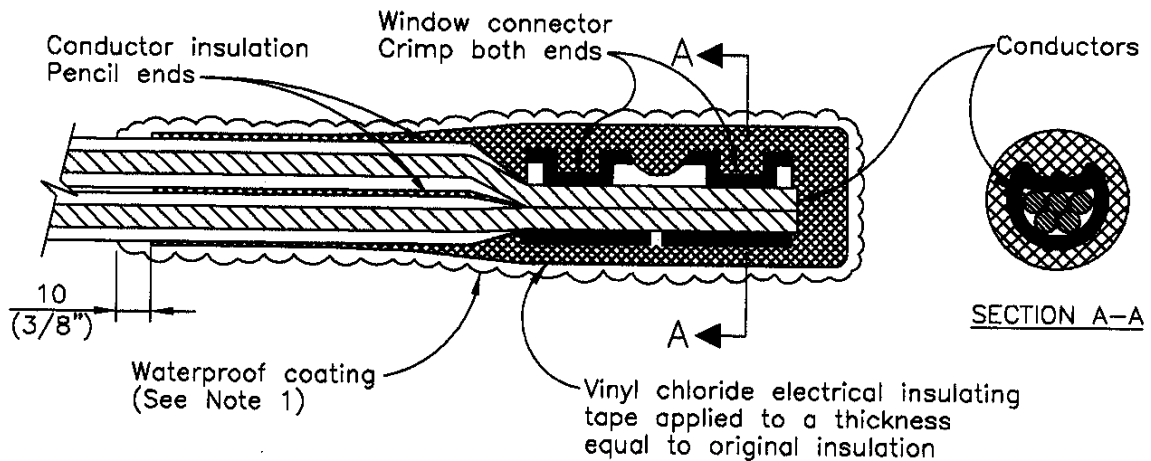


NOTES:

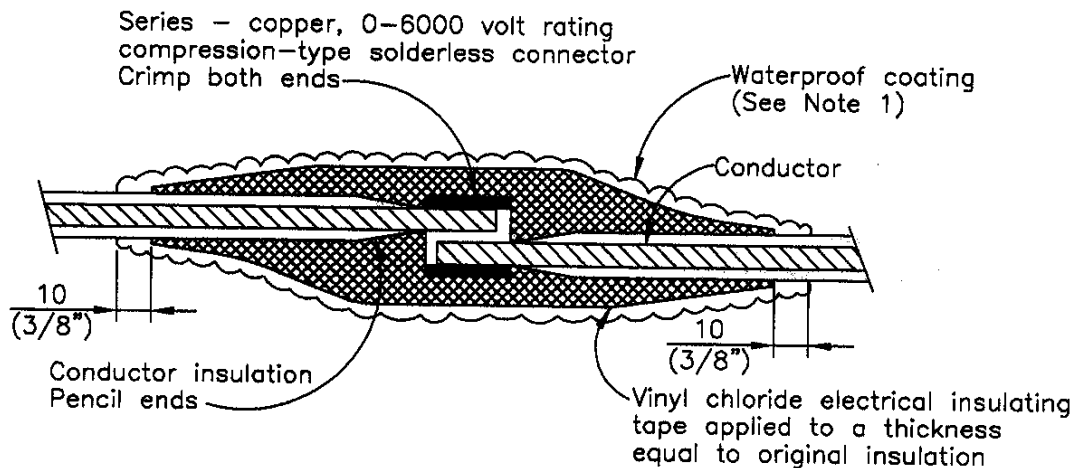
1. Pole service connection is intended for temporary service and shall be installed only when specified.
2. Contractor shall notify City Light and Power at (562) 483-2000 48 hours before installing any conduit.
3. Backing board shall be 20 mm (3/4") redwood with 20 x 40 mm (3/4" x 1 1/2") redwood cleats top and bottom. Fasten board to pole with four 16d galvanized nails. Paint board with two coats of exterior green enamel on all sides.

Dimensions are in millimeters, except as noted

REVISIONS		CITY OF LONG BEACH, CALIFORNIA DEPARTMENT OF PUBLIC WORKS	STANDARD PLAN NO.
NO.	DATE		
1	01/22/98	POWER POLE SERVICE CONNECTION	METRIC 711
2	12/23/02		
3		APPROVED BY: <i>Mark Chittell</i> CITY ENGINEER R.E. No. 40599	SHEET 1 OF 1
4			
		DATE: 1/10/03 EX. DATE 03/31/03	



MULTIPLE CONDUCTOR TYPE
(MULTIPLE CIRCUITS)



SINGLE CONDUCTOR TYPE
(SERIES CIRCUITS)

WINDOW SPLICE CONNECTORS

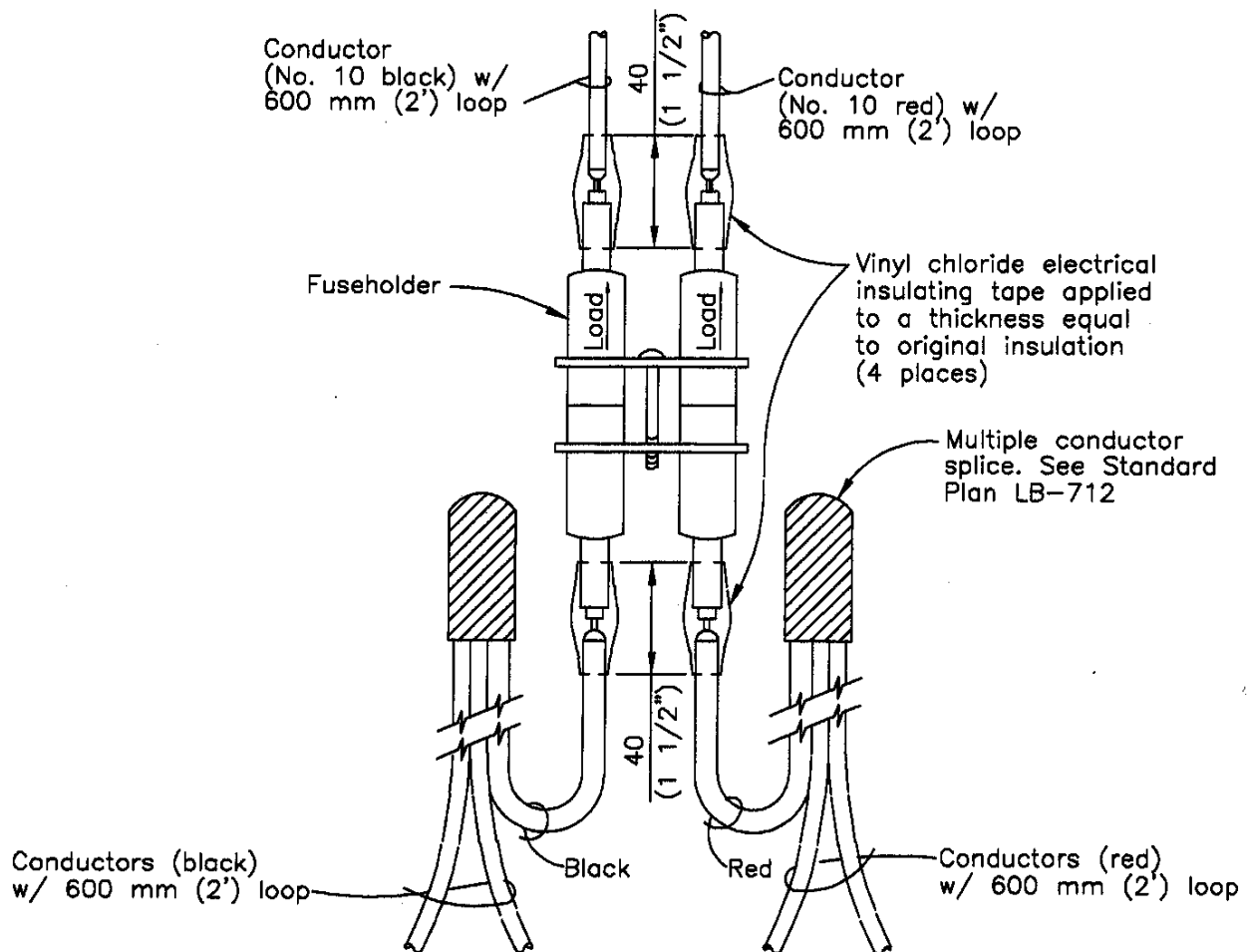
Note: Does not apply to traffic signals

NOTES:

1. Waterproof coating shall be 3M Skotchkote Part No. 054007-14853 or approved equal.
2. Wire nuts shall not be used for splices.

Dimensions are in millimeters, except as noted

REVISIONS		CITY OF LONG BEACH, CALIFORNIA DEPARTMENT OF PUBLIC WORKS	STANDARD PLAN NO.
NO.	DATE		
1	01/26/98	CONDUCTOR SPLICING DETAILS	METRIC 712
2	12/23/02		
3	02/28/03		
4		APPROVED BY: <i>[Signature]</i> CITY ENGINEER R.E. NO. 40599	DATE: 4/16/03 EX. DATE: 03/31/07
			SHEET 1 OF 1

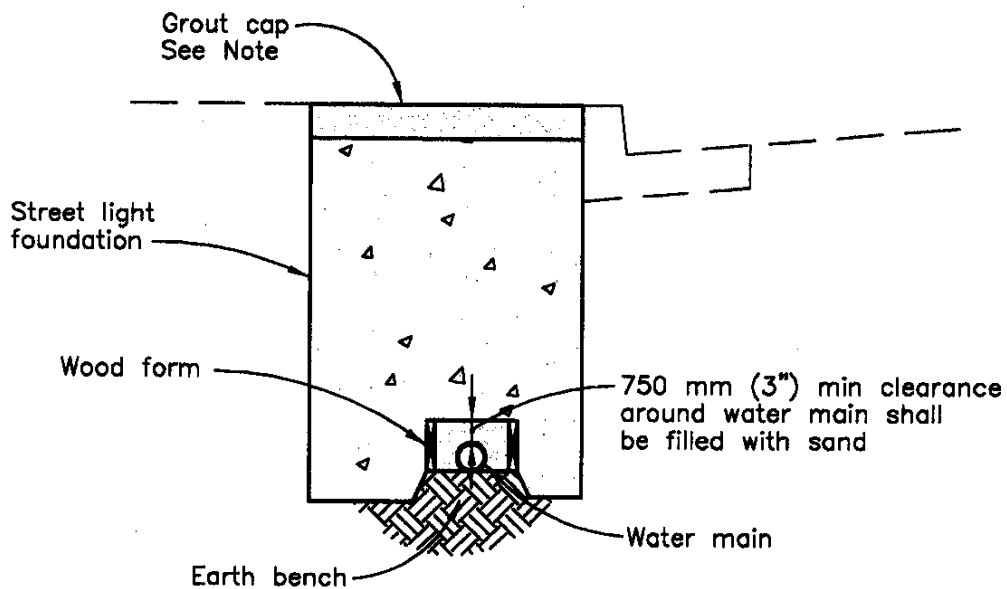


Fuse size for high pressure sodium lamps shall be 15 A

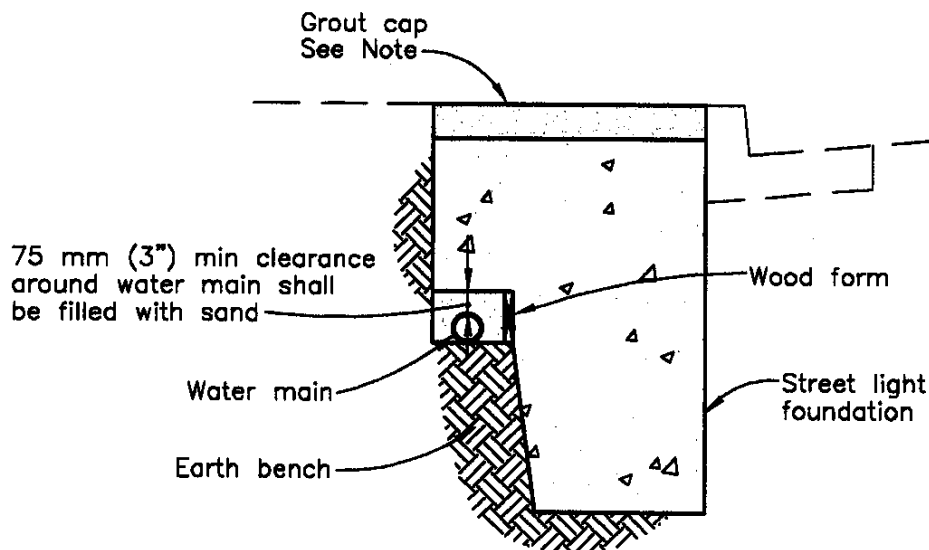
Note: Does not apply to safety lighting at signalized intersections.

Dimensions are in millimeters, except as noted

REVISIONS		CITY OF LONG BEACH, CALIFORNIA DEPARTMENT OF PUBLIC WORKS	STANDARD PLAN NO.
NO.	DATE		METRIC 713
1	01/26/98	FUSEHOLDER DETAILS	SHEET 1 OF 1
2	12/23/02		
3	02/28/03		
4			
APPROVED BY: <i>[Signature]</i>		DATE: <i>4/16/03</i>	
CITY ENGINEER <i>[Signature]</i> No. 40589		EX. DATE: 03/31/07	



DETAIL A



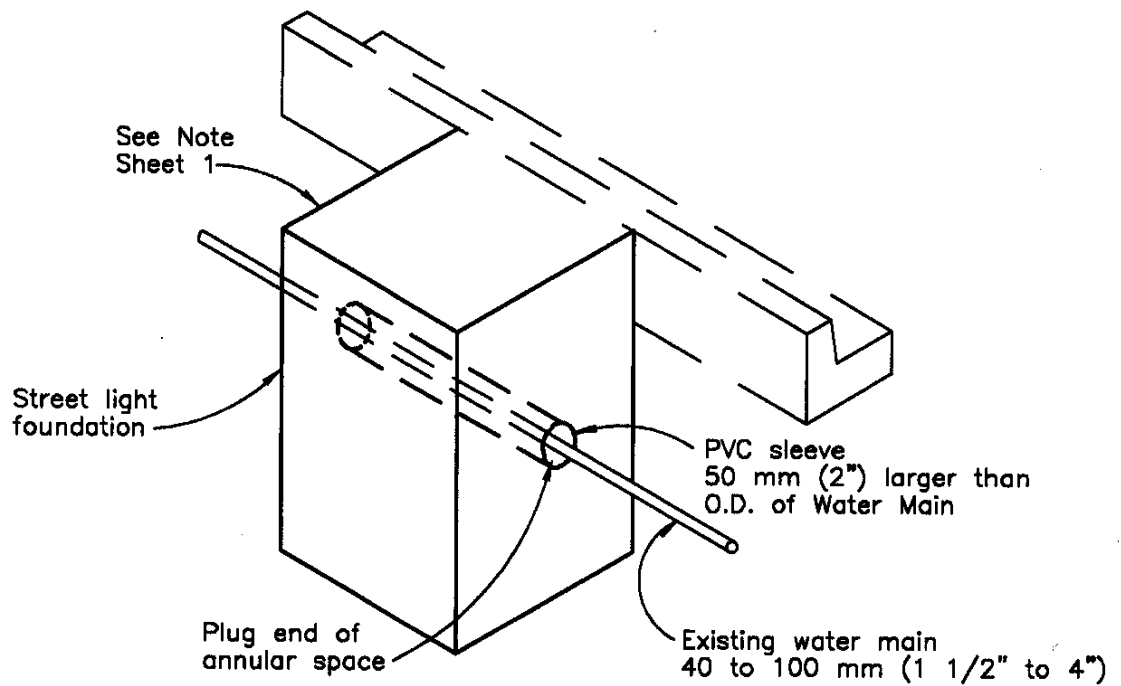
DETAIL B

NOTE:

Prior to constructing PCC grout cap the Contractor shall notify the Electrical Superintendent to stamp the finished cap with concrete stamp reading "NOTIFY LB WATER DEPT PRIOR TO REMOVAL OF BASE".

Dimensions are in millimeters, except as noted

REVISIONS		CITY OF LONG BEACH, CALIFORNIA DEPARTMENT OF PUBLIC WORKS	STANDARD PLAN NO.
NO.	DATE		
1	01/26/98	WATER MAIN ENCASEMENT DETAIL	METRIC 714
2	12/23/02		
3		APPROVED BY: <i>Mark Chittell</i> CITY ENGINEER R.E. No. 40599	SHEET 1 OF 2
4			
		DATE: 1/19/03 EX. DATE: 03/31/03	



DETAIL C

NOTE:

If bell coupling is encountered the O.D. of the sleeve shall be 50 mm (2") larger than the O.D. of the bell.

Dimensions are in millimeters, except as noted

REVISIONS		CITY OF LONG BEACH, CALIFORNIA DEPARTMENT OF PUBLIC WORKS	STANDARD PLAN NO.
NO.	DATE		
1	01/26/98	WATER MAIN ENCASEMENT DETAIL	METRIC 714
2	12/23/02		
3		APPROVED BY: <i>Mark Antuffel</i> CITY ENGINEER R.E. No. 20589	SHEET
4			DATE: 1/10/03 EX. DATE 03/31/03
			2 OF 2

NOTES:

1. Electroliers shall consist of high pressure sodium luminaires with integral ballast and 240 volt multiple circuitry.
2. Conductors and bond wires shall be stranded copper wire with 600-volt, grade THWN insulation, except bond wire connection to street light anchor bolt shall be solid copper wire. Color of insulation for each pair of conductors shall consist of one black and one red conductor. Color of bond wire insulation shall be green.
3. Conductors between street light pull boxes shall be No. 8 wire unless otherwise shown on the project plans.
4. Conductors between electrical service pull box and street light control cabinet shall be No. 6 wire unless noted otherwise shown on the project plans.
5. Conductors between fuseholder in street light pull box and luminaire shall be No. 10 wire.
6. Bond wire shall be the same size as the conductors except at the street light foundation, as shown on the Standard Plans.
7. An electrical service control cabinet shall be installed at each feed point. The cabinet shall conform to the Long Beach Standard Plans and the Long Beach Specifications for Electrical Service Enclosure.
8. The ground rod to be constructed with the electrical service cabinet shall have a resistance to ground not exceeding 25 ohms.
9. Interfering water service laterals and water mains shall be encased in the street light foundation as shown on the Standard Plans.
10. Gas service laterals, water bullhead laterals or water fittings and valves shall not be incased in the street light foundation. The foundation shall be constructed to clear these interferences by 600 mm (2') minimum at a location approved by the Engineer.

Dimensions are in millimeters, except as noted

REVISIONS		CITY OF LONG BEACH, CALIFORNIA DEPARTMENT OF PUBLIC WORKS	STANDARD PLAN NO.
NO.	DATE		METRIC 716
1	01/27/98	GENERAL NOTES	SHEET 1 OF 1
2	12/23/02		
3			
4			
APPROVED BY: <i>Mark Christoffel</i>		DATE: <i>1/19/03</i>	
CITY ENGINEER R.E. No. <i>10599</i>		EX. DATE: <i>03/31/03</i>	